18. Explain the Golden ratio of the nature Fibonacci.

19. Expound the principle behind the invention of barcodes.

20. Expound on the capitalization rules with examples.

NOVEMBER/DECEMBER 2024

FPE20C/CPE20C — PROFESSIONAL ENGLISH FOR PHYSICAL SCIENCE

Time : Three hours Maximum : 75 marks

Shanmuga Industries Arts & Science College T.V.Malai

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is communicative competence?
2. What is lexical competence?
3. Who is called the "Prince of Mathematicians"?
4. Explain that Gauss was a Child prodigy.
5. Who is Leonardo Pisano?
6. What is the Fibonacci sequence?
7. Define the chemical formula of Baking soda.
8. Explain the barcodes with examples.
9. Who is Cortana?
10. What does the turning test mean?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Why did the professor go to the neighboring village?

Or

(b) Write the meaning for this vocabulary with examples.

(i) Peasant –

(ii) Hoarded –

(iii) Grenade –

(iv) Agitator –

(v) Muzzle –

12. (a) Explain the origin of the fitness tracker.

Or

(b) Write the meaning of this vocabulary with examples.

(i) Omnipotent –

(ii) Encompass –

(iii) Cyborg –

(iv) Upheaval –

(v) Epistemological –

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13. (a) What caused the release of Phosgene in the Union Carbide plant?

Or

(b) Explicate Electronic Warfare as a defense system.

14. (a) Expound the surface tension of water.

Or

(b) Explicate the acid-base chemistry with an example.

15. (a) Explain the difference between paraphrasing and summarizing.

Or

(b) Explicate the format of writing minutes of a meeting.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the major five components of communicative competence.

17. Write an essay on the applications of AI in the fields of health, education, agriculture, and Banking sectors.